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ABSTRACT

This booklet, in a "flipchart" format, provides a ready resource of selected core terms and their definitions from "The Literacy Dictionary: The Vocabulary of Reading and Writing" that bear upon reading and writing instruction. Some entries in the booklet also refer to related terms that can be further examined in "The Literacy Dictionary." The 41 terms in the booklet are arranged in sections entitled Literacy; Read, Reading, Reading Process; Reading Methods; Readability; Assessment; Remedial/Corrective Reading; and Writing. Six essays from "The Literacy Dictionary" are included--the essays were selected for their topical currency and for the clarity of viewpoints expressed by their authors. The booklet is designed for two uses: as a handy, portable reference for core terms common to the literature of reading and writing; and as an invitation to explore in greater depth the diverse yet related terminology assembled in "The Literacy Dictionary." (RS)

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What Is Literacy?

Selected Definitions and Essays From The Literacy Dictionary:

The Vocabulary of Reading and Writing

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Preface

What Is Literacy? Selected Definitions and Essays From The Literacy Dictionary: The Vocabulary of Reading and Writing is a collection that illustrates contemporary and historical terminology related to the literacy field. Before the scope of this collection can be understood, it first is important to review the importance of the publication on which this compilation is based.

The Literacy Dictionary (1995) is a depository of literacy and related concepts as embodied by the words that name and define them. As a historical resource, *The Literacy Dictionary* furnishes examples of how the many facets of literacy have been defined in the past. And as a contemporary resource, it sets forth the dynamic nature of literacy and related fields as new terms emerge, while established terms hold firm or change with advances of knowledge. (See the essay titled "Literacy" on pages 19 and 20, which illuminates the history and dynamism of the literacy field.) *The Literacy Dictionary* thus provides a resource that brings together in a single volume the extensive vocabulary of reading and writing for the use of educational practitioners, researchers, and other interested persons, both in the United States and throughout the world.

What Is Literacy? has been compiled to provide a ready resource of selected core terms and their definitions that bear upon reading and writing instruction. Some entries also refer to related terms that can be further examined in *The Literacy Dictionary*. (See, for example, the list of various types of

historical and contemporary reading methods that is offered in the "Reading Methods" section.) Cross-references that have been retained in the entries likewise may be consulted in *The Literacy Dictionary*.

Six essays from *The Literacy Dictionary* have been incorporated into *What Is Literacy?* (see pages 19–27). Selected for their topical currency and for the clarity of viewpoints expressed by their authors, these essays are designed to extend understandings of specific terms, and for some, to provoke alternative ways of thinking about aspects of reading and writing instruction.

How might *What Is Literacy?* be used? Two purposes come to mind. First, the "flipchart" format provides a handy, portable reference for core terms common to the literature of reading and writing. This resource thus provides a standard reference point useful both for personal understanding and for professional and public discussions of these terms. As such, this book will be useful in settings such as school faculty meetings, inservice sessions, preservice classes, parent meetings, and with other groups for whom reading and writing instruction is a central topic of concern.

Second, *What Is Literacy?* offers an invitation to explore in greater depth the richly diverse yet related terminology that has been assembled in *The Literacy Dictionary*, terminology that reflects the multidimensional and multidisciplinary scope of the sources from which it stems. Words and their meanings are the currency of a profession. They can be spent wisely or imprudently. This flipchart and the book from which it originates provide a trove of valuable terms for your prudent use.

Richard E. Hodges
Editor, The Literacy Dictionary

Literacy

■ **emergent literacy** development of the association of print with meaning that begins early in a child's life and continues until the child reaches the stage of conventional reading and writing; "the reading and writing concepts and behaviors of young children that precede and develop into conventional literacy" (Sulzby, cited in Barr et al., 1991).

■ **functional literacy** 1. a level of reading and writing sufficient for everyday life but not for completely autonomous activity. 2. the application of the skills and knowledge of reading and writing to adult or

Representative Types of *Literacy*

academic literacy	economic literacy	prison literacy
adult literacy	emancipatory literacy	protoliteracy
advanced literacy	emergent literacy	quantitative literacy
autonomous literacy	family literacy	reading literacy
basic literacy	functional literacy	real-world literacy
biliteracy	high literacy	restricted literacy
community literacy	ideological literacy	scribal literacy
computer literacy	intergenerational literacy	survival literacy
conventional literacy	marginal literacy	television literacy
craft literacy	media literacy	vernacular literacy
critical literacy	minimal literacy	visual literacy
cultural literacy	polyglot literacy	workplace literacy
cultured literacy	pragmatic literacy	

functional literacy (continued)

near-adult responsibilities in the workplace; adult literacy; functional adult literacy; pragmatic literacy; required literacy. 3. "the knowledge and skills in reading and writing which enable a person to engage in all those activities in which literacy is normally assumed in his culture or group" (Gray, 1956). *Note*: The genesis of current conceptions of functional literacy may be seen in Gray's reference to engagement in cultural or group activities. This allusion was later extended in UNESCO documents to include both individual and social functions, then to the economics of the workplace (work-oriented literacy), and finally to include personal fulfillment, social progress, and economic development.

■ **illiteracy** *n.* 1. the inability to read or write a language; specifically, "the inability to use reading and writing with facility in daily life" (UNESCO, 1988). *Note*: The 1988 UNESCO proclamation also stated that "widespread illiteracy hampers economic and social development; it is also a gross violation of the basic human right to learn, know, and communicate." In English, the negative term *illiteracy* preceded its positive counterpart *literacy* by over 200 years. This is paralleled in other languages, as in Brazilian Portuguese, in which the terms *analfabeto* and *anafalbetismo* appeared much earlier than *alfobetismo* and *letremento* (Soares, 1992). 2. lack of education. 3. a mistake in the expected use of language; solecism.

■ **literacy** ***n.*** **See the essay titled "Literacy" on pages 19 and 20 for a thorough examination of this term.**

Read, Reading, Reading Process

■ **read** *Note*: The definitions of *read* are more numerous and tend to be more discrete than those of *reading*. Many are drawn from a long literary heritage and are a catalog of subtle meaning distinctions—often metaphorical extensions of more basic definitions—made by writers and speakers. The chief but not exclusive referent of most definitions of *read* is *silent reading*. 1. *v.* to engage in silent reading. 2. See **oral reading**. 3. *v.* to get the literal or stated meaning from something read. See **comprehension** (def. 1); **literal comprehension**; **literal meaning**. 4. *v.* to transmit meaning; to comprehend text by engaging in an interchange of ideas, or a transaction, between the reader and the text. See **comprehension** (def. 2); **reading** (defs. 10, 11). 5. *v.* to find an unstated meaning in something read, as *read between the lines*. *Cp.* **interpretation**. 6. *v.* to quickly look over or scan, as *read the newspaper headlines*. 7. *v.* to react critically to something read. *Cp.* **critical evaluation**; **critical reading**. 8. *v.* (*chiefly Brit.*) to study, usually at a university, a subject matter field, as *read philosophy*. 9. *v.* to acquire knowledge about some topic by reading; learn; as *read about dinosaurs*. 10. *v.* to comprehend the fuller significance of something that is read, as *Can you read Melville's message behind the story of Moby Dick?* 11. *v.* to empathize with characters in imaginative literature, as *read the humor in Don Quixote's many predicaments*. 12. *v.* to identify the mood, setting, and events of a story or play. 13. *v.* to accept without hesitation or criticism the point of view and other conditions set by the author in presenting a story or play; to engage in "that willing suspension of disbelief" (Samuel Taylor Coleridge, *Biographia Literaria*). 14. *v.* to give meaning to

read (continued)

nongraphic or nonverbal signs, as *read the signs of spring, read a person's mood or character*. 15. *v.* to discover or explain, as *read the meaning of a riddle*. 16. *v.* to predict or foresee, as *Carmen could read her fate in the cards*. 17. *v.* to understand another graphic or verbal language when reading it, as *read finger spelling, read German*. 18. *v.* to have a certain wording, as *Text A reads "percept" but text B reads "precept."* 19. *v.* to give directions about, as *read "x" for "y."* 20. *v.* to examine reading material for mechanical errors or to check the conformity of a copy with its original; proofread. 21. *n.* the matter read, as *That book is a good read*. 22. **read into**, to infer a meaning in something read or experienced. 23. *v.* to scan or transfer data in the internal operation of a computer or between computers. 24. **read in**, to supply information to a computer. 25. **read out**, to get information from a computer.

reading *n. Note*: Huey, the first great scholar of the psychology and pedagogy of reading, observed that "to completely analyze what we do when we read would almost be the acme of a psychologist's achievements, for it would be to describe some of the most intricate workings of the human mind" (1908). Silent reading, to which the following group of definitions refers, still remains an elusive concept. Its definition varies with the stage of reading development considered—that of the beginning, intermediate, or mature reader (Spache, 1977)—and with one's point of view toward reading as a visual task, a word-recognition task, a thinking process, or a social event. Most significantly, because reading is a learned process, definitions of *reading* reflect differing assumptions about learning. During the first half of the 20th century, an associational, behavioristic concept of learning dominated definitions. Later, a view of reading as a language-based, developmental process was advanced by scholars drawing largely from cognitive psychology and linguistics. Views of the reading process have grown increasingly multidisciplinary, especially with respect to sociological, anthropological, and sociolinguistic contributions. As a result, not only have

the definitions of *reading* changed over time but so have implications for reading instruction. The evolutionary though somewhat irregular pattern of process-oriented definitions of *reading* is shown particularly in the sequence of defs. 1–13 following. Initially, reading was conceived as an associative perceptual act (defs. 1, 2). Later, this view was extended to include comprehension and related thinking processes (defs. 3–6). Toward midcentury, definitions of *reading* became more and more cognitively oriented (defs. 7–13), thus accentuating the differing theoretical and pragmatic viewpoints that scholars bring to its study. Many scholars also relate reading with the socially directed intentions of language, as seen in Vygotsky's view that use of "language is a highly personal and at the same time a profoundly social process" (John-Steiner & Souberman, 1978); for example, Harste et al.'s assertion that reading is a "social event" (1984); and Goodman's view that reading is "a transactional socio-psycholinguistic process" (1994). The following sampling of definitions of *reading* amply demonstrate that such definitions need to be seen in the context of the theoretical and pragmatic orientations of the definer. 1. "distinguishing the separate letters both by the eye and by the ear, in order that, when you later hear them spoken or see them written, you will not be confused by their position" (Plato). 2. "nothing more than the correlation of a sound image with its corresponding visual image" (Bloomfield, 1938). 3. "the perception and comprehension of written messages in a manner paralleling that of the corresponding spoken messages" (Carroll, 1964). 4. "reasoning" (Thorndike, 1922). 5. "an understanding not only of the literal or sense meaning of a passage but also the meanings implied by the author's mood, his tone, his intent, and himself" (Richards, 1938). 6. "the central thought process by means of which meaning is put into the symbols appearing on the printed page" (Gray, 1940). 7. "the reconstruction of the events behind the symbols" (Korzybski, 1941). 8. "an interaction between the reader and written language, through which the reader attempts to reconstruct a message from the writer" (Goodman, 1968). 9. "a sampling, selecting, predicting, comparing and confirming activity

reading (continued)

in which the reader selects a sample of useful graphic cues based on what he sees and what he expects to see" (Goodman, 1975). 10. "intentional thinking during which meaning is constructed through interactions between text and reader" (Durkin, 1993). 11. "transacting with a text to create meaning...bringing meaning to a text in order to create meaning from it" (Galda et al., 1993). 12. "the recognition of printed or written symbols which serve as stimuli for the recall of meanings built up through past experience, and the construction of new meanings through manipulation of concepts already possessed by the reader. The resulting meanings are organized into thought processes according to the purposes adopted by the reader. Such an organization leads to modified thought and/or behavior, or else leads to new behavior which takes its place, either in personal or in social development" (Tinker & McCullough, 1968). 13. "a process of translating signs and symbols into meanings and incorporating the new information into existing cognitive and affective structures" (Robeck & Wallace, 1990). 14. "the process of making discriminative responses...in the broadest sense...the process of interpreting sense stimuli and of adapting one's behavior with regard to them" (Spencer, cited in Gray & Rogers, 1956). 15. "part of a communication sequence that begins with the emotional utterances of infants and develops into a complex lexicon of spoken and written English" (Robeck & Wallace, 1990). 16. any examination and interpretation of symbolic data, as *the reading of test results*. 17. any material that is read, as *the reading assigned in the course*. 18. a particular version or form of material to be read, as *a modern reading of the Bible*. 19. the breadth of knowledge acquired through reading. 20. *pl.* a collection of writings of a particular type or from a particular field, often used as supplementary text materials in instruction.

■ **reading process** 1. an act of reading taken as a whole; what happens when a person processes text to obtain meaning. 2. *pl.* any of the subprocesses, as word identification or comprehension, that are involved in the act of reading.

■ **reader response** **See the essay titled "Reader Response" on pages 20 and 21 for a thorough examination of this term.**

■ **comprehension** *n. Note*: Comprehension, "the essence of reading" (Durkin, 1993), is often taken to mean *reading* comprehension in the literacy literature unless restricted specifically or by inference from its context. 1. the reconstruction of the intended meaning of a communication; accurately understanding what is written or said. *Note*: The presumption here is that meaning resides in the message awaiting interpretation, and that the message received is congruent with the message sent. 2. the construction of the meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in a particular communicative context. *Note*: The presumption here is that meaning resides in the intentional problem-solving, thinking processes of the interpreter during such an interchange, that the content of meaning is influenced by that person's prior knowledge and experience, and that the message so constructed by the receiver may or may not be congruent with the message sent. "Comprehension is a process in which the reader constructs meaning [in] interacting with text...through a combination of prior knowledge and previous experience; information available in text; the stance [taken] in relationship to the text; and immediate, remembered or anticipated social interactions and communications" (Ruddell et al., 1994). "The meanings of words cannot be 'added up' to give the meaning of the whole. The click of comprehension occurs only when the reader evolves a schema that explains the whole message" (Anderson, 1993). *Cp.* **comprehension strategy**; **reading**; **reading-writing relationships**; **transactional theory**. 3. See **reading comprehension**. 4. all that a word or concept implies; connotation; as *one's comprehension of literacy*. 5. the symbolic meaning or sign of an experienced event.

Reading Methods

■ **reading method** 1. any of several relatively specific procedures or steps for teaching one or more aspects of reading, each procedure embodying explicitly or implicitly some theory of how children learn and of the relationship between the written and spoken language. *Note*: The history of reading is replete with methods, sometimes referred to as *approaches*, of different types. Some, as *analytic method*, *synthetic method*, and *global method*, refer to the overall pattern of instruction; others, as *word method*, *phrase method*, *sentence method*, and *story method*, refer to the language unit that is emphasized; still others, as *look-and-say method* and *phonic method*, refer to a distinctive mode of instruction. 2. sometimes, a specific reading program that translates a general approach into specific instructional materials, as *the initial teaching alphabet*.

Types of *Reading Methods/Approaches*

ABC method	integrated method	phrase method
alphabet method	Jacotot method	sentence method
analytic method	kinesthetic method	spelling method
eclectic method	letter phonics	story method
Fernald(–Keller) method	look-and-say method	synthetic method
Gillingham method	Orton–Gillingham method	visual-motor method
gingerbread method	phonics	word method
global method	phonovisual method	

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■ **phonics** *n.* a way of teaching reading and spelling that stresses symbol-sound relationships, used especially in beginning instruction.

■ **whole-word methodology** an approach to reading instruction that deals with the learning of words as wholes.

Types of *Phonics*

analytic	inductive
cluster	intrinsic
deductive	letter
explicit	synthetic
extrinsic	whole-word
implicit	

■ **word method** 1. a way of teaching reading in which a substantial number of words are learned as whole units before word analysis is started; a "words-to-reading" system (Mathews, 1966). *Note*: "The word method, beginning with the *Orbus Pictus*...was very little used in America until 1870.... The pictures of the *Orbus Pictus* were intended to suggest the names printed below, without using any tedious spelling" (Huey, 1908). "This is a modern system, known since the close of the eighteenth century, but put into wide-spread practice about 1900.... In the 1830s and 1840s it was called the new method, later the word method, and later still the look-and-say method.... The method is that of starting children in reading by having them memorize words without analyzing them into letters and sounds" (Mathews, 1966). 2. a way of teaching reading that begins with whole words but either immediately subjects them to word analysis or introduces a parallel phonics program; a "words-to-letters" system (Mathews, 1966). 3. any analytic approach or method for teaching reading; sight method. Note: "If the word method is not accompanied by the analysis of words into their elements, it should not be classified as an analytic method" (Gray, 1956). See also **analytic method**; **eclectic method**.

Readability

■ **readability** *n.* 1. ease of comprehension because of style of writing. *Note*: "Readability, together with accessibility and subject interest, is a major determinant of one's reading" (Waples et al., 1940). Many variables in text may contribute to readability, including format, typography, content, literary form and style, vocabulary difficulty, sentence complexity, concept load or density, cohesiveness, etc. Many variables within the reader also contribute, including motivation, abilities, background knowledge, and interests. Text and reader variables interact in determining the readability of any piece of reading material for any individual reader. 2. an objective estimate or prediction of reading comprehension of material, usually in terms of reading grade level, based on selected and quantified variables in text, especially some index of vocabulary difficulty and of sentence difficulty. *Note*: In teaching practice, def. 2 may sometimes be accepted as accurately predicting readability, although it is wiser to combine the subjective variables noted in def. 1 with the more objective ones in making such estimates. Similarly, in writing practice, changes in vocabulary and sentence difficulty may sometimes be considered sufficient to produce more readable material, but experienced writers realize that the variables in def. 1 must also be considered. 3. ease of reading because of the interest value or pleasantness of writing, as *the readability of a good mystery story*. 4. (*archaic*) legibility of handwriting or typography. **See also the essay titled "Readability" on pages 24 and 25 for further discussion of this term.**

■ **readability formula** any of a number of objective methods of estimating or predicting the difficulty level of reading materials by analyzing samples from them, with results usually expressed as a reading grade level. *Note*: Readability formulas are generally based on vocabulary difficulty, syntactic difficulty, and a number of related factors singly and in combination, usually in terms of a multiple-regression equation. Word length or familiarity and average sentence length in words tend to be the most significant or convenient predictors of the reading difficulty of materials as measured by readability formulas. Estimates of formula validity are usually based on relationships with three types of criteria: *a*. reading comprehension scores. *b*. reading speed or efficiency. *c*. acceptability determined either by readers' or experts' judgments or by reader perseverance.

■ **Dale-Chall readability formula** a method of estimating the difficulty level of reading material based on the percentage of words not on the Dale List of 3,000 Familiar Words and on the average number of words in sample sentences. *Note*: This method, developed by Dale and Chall, predicts 50 percent comprehension, with a table yielding corrected reading grade levels. A considerable number of modifications, extensions, and special uses of the formula have been suggested since the formula's first publication in 1948, but it continues to be used primarily as originally published.

■ **Flesch readability formula** a method of estimating the difficulty level of adult reading material developed by Flesch and published in 1943, originally based on sentence length in words, the number of affixes, and the number of personal references in 100-word samples of material. *Note*: The formula has undergone several revisions. A 1948 revision called the Reading Ease formula, based on number of syllables per 100 words and sentence length in words, has been used widely.

■ **Fry readability graph** a method of estimating the difficulty level of reading material developed by Fry and based on the number of syllables and sentences in 100-word samples, with corresponding grade-level values read from a graph. *Note*: A number of modifications have been proposed since the graph's original publication in 1965, chiefly in extending the values downward to preprimer level and upward to college. Also **Fry readability scale**.

■ **Spache readability formula** a method developed by Spache and originally published in 1953 for estimating the difficulty of primary level reading materials based on average sentence length in words and number of words. *Note*: The formula has undergone several revisions since 1953, chiefly in the list of words used.

■ **cloze procedure** 1. any of several ways of measuring a person's ability to restore omitted portions of an oral or written message by reading its remaining context, as in the Degrees of Reading Progress tests. 2. the completion of incomplete utterances as an instructional strategy to develop reading or listening comprehension with respect to sensitivity to style, attention during extended passages, etc. 3. in second-language instruction, focusing attention on specific grammatical features by careful selection of omitted words.

Assessment

assessment *n.* the act or process of gathering data in order to better understand the strengths and weaknesses of student learning, as by observation, testing, interviews, etc. *Note*: Some writers use the term *assessment* to refer also to the judgments or evaluations made after data are gathered. See also **evaluation**.

Types of *Assessment*

alternative	informal
authentic	integrated
classroom based	learner
clinical	needs
content referenced	on demand
differential	performance
formal	

alternative assessment the use of means of assessment other than standardized tests to achieve "direct, 'authentic' assessment of student performance on important learning tasks" (Warther et al., 1993). See also **authentic assessment**.

authentic assessment a type of assessment that seeks to address widespread concerns about standardized, norm-referenced testing by representing "literacy behavior of the community and workplace" and reflecting "the actual learning and instructional activities of the classroom and out-of-school worlds" (Hiebert et al., 1994), as with the use of portfolios; naturalistic assessment. See also **alternative assessment**; **assessment**. *Cp.* **classroom-based assessment**.

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■ **formal assessment** the collection of data using standardized tests or procedures under controlled conditions.

■ **informal assessment** appraisal by casual observation or by other nonstandardized procedures. *Cp.* **formal assessment**; **integrated assessment**.

■ **performance assessment** the measurement of educational achievement by tasks that call for the student to produce a response like that required in the instructional environment, as in portfolios or projects; performance-based assessment. *Note*: *Performance assessment* is now commonly used rather than *performance test* to represent a broader domain of achievement. *Cp.* **performance test**.

Remedial/Corrective Reading

■ **reading disability** 1. reading achievement that is significantly below expectancy for both an individual's reading potential and for chronological age or grade level, sometimes also disparate with a person's cultural, linguistic, and educational experiences. 2. reading achievement significantly below what could reasonably be expected of a person; a marked ability-achievement discrepancy. *Note*: *Reading disability* is often inappropriately used as a synonym for *reading retardation* or *reading backwardness*. See also **learning disability**. **See the essay titled "Dyslexia" on pages 25 to 27 for a thorough examination of a specific type of reading disability.**

■ **remedial reading** 1. specialized reading instruction adjusted to the needs of a student who does not perform satisfactorily with regular reading instruction. 2. intensive, specialized reading instruction for students reading considerably below expectancy. *Note*: Remedial reading is usually highly individualized reading instruction conducted outside the classroom in a special class, school, or clinic by a teacher trained in the use of clinical methods in reading. Eligibility for some remedial reading programs may be determined by legal definitions or by criteria established by the school or school district. 3. developmental reading instruction set at a different pace and designed for an individual student or a selected group. *Cp.* **corrective reading**.

■ **remedial reading program** 1. the curriculum and operation of a program designed to provide intensive remediation in reading, usually by a teacher with advanced training and in a setting that allows flexible adjustment of materials and methods to individual differences. 2. any set of curriculum materials, usually commercially prepared, for the remediation of reading skill deficits.

■ **reading clinic** a place where individuals with relatively severe reading problems may receive help from specially trained personnel; (*Brit.*) remedial centre. *Cp.* **readi.g center**.

■ **corrective reading** supplemental, selective instruction for minor reading difficulties that is more specific than developmental reading but less intensive than remedial reading and is often provided within a regular classroom by the regular teacher, an aide, or a peer tutor. *Cp.* **remedial reading**.

■ **oral reading test** an individually administered test or inventory for assessing oral reading behaviors, performance, or competence. *Note*: Standardized and informal oral reading tests are usually scored on the basis of word-recognition errors (e.g., mispronunciations, omissions), comprehension, and perhaps reading rate. What constitutes a word recognition error, how comprehension is checked, and what criteria are used to determine adequate word recognition and comprehension vary from test to test. The reader's fluency, task involvement, etc., also may be noted by the examiner. See also **informal reading inventory**; **miscue**; **miscue analysis**.

■ **Reading Recovery** 1. a registered trademark for an early intervention program developed by Clay (1985) for use with children at risk in reading progress after 1 year of schooling. *Note*: The program requires a highly trained specialist who can accelerate children's rate of learning so they succeed when returned to the regular classroom. 2. a teacher-education program designed by Clay (1987) in which good teaching is defined as a "theory building process in which good teachers learn to make explicit their assumptions about reading" (Myers, 1991).

Writing

■ **writing** *n.* 1. the use of a writing system or orthography by people in the conduct of their daily lives and in the transmission of their culture to other generations. 2. the process or result of recording language graphically by hand or other means, as by letters, logograms, and other symbols. 3. a meaningful set of ideas so expressed. *Cp.* **composition**. 4. *pl.* literary works or forms. 5. a person's distinctive style of graphically recording language; handwriting. *v.* write.

Types of *Writing*

alphabetic	phonetic
boustrophedon	pictorial
creative	poetic
cursive	process
expressive	sinistrad
logosyllabic	syllabic
manuscript	transactional
mirror	

■ **writing acquisition** the developmental progression in learning to write for purposes of communication, from the young child's use of scribbles and drawings in an effort to communicate to the sophistication of the mature writer who has gained control of writing processes and has developed a sense of audience. Also **writing development**.

■ **writing approach to reading** the encouragement of children to write to help them understand that words are written-down speech. *Note*: The writing approach to reading stresses meaning over grapheme-phoneme correspondences and interprets invented spellings as attempts by the student to understand the code system. See also **experience approach**.

■ **writing process** the many aspects of the complex act of producing a written communication; specifically, planning or prewriting, drafting, revising, editing, and publishing. See also **process writing**.

■ **invented spelling** the result of an attempt to spell a word whose spelling is not already known, based on a writer's knowledge of the spelling system and how it works. *Note*: Invented spellings, beginning with the pioneer work of Read (1971), are used both to study young writers' emerging awareness of conventional spelling patterns and as an instructional strategy in beginning writing as the child moves toward controlled use of conventional spelling of words. **See the essay titled "Phonemic Awareness" on pages 21 and 22 for additional context concerning this term.**

■ **process writing** a writing instruction model that views writing as an ongoing process and in which students follow a given set of procedures for planning, drafting, revising, editing (proofreading and correcting), and publishing (sharing by some means) their writing. See also **writing process**.

■ **writing system** 1. a standardized set of graphic symbols used to represent the speech sounds, syllables, morphemes, or words of a given language, as alphabetic, syllabic, logographic, etc. 2. any system of readable symbols, including alphabets, shorthand systems, etc. *Note*: The historical development of writing systems is believed to have evolved from *pictorial writing* (up to 3500 B.C.) to *logography*, as in Egyptian hieroglyphics (3000 B.C.) and Chinese characters (1500 B.C.); to *logosyllabic writing*, as in the Sumerian and Hittite cuneiform (2500 B.C.); to *syllabic writing*, as in Japanese kana; to *alphabetic writing*, as in Phoenician (1000 B.C.), Greek (800 B.C.), Arabic and Gothic (A.D. 400), and Cyrillic (A.D. 900) writing systems. See also **alphabetic writing**; **ideography**; **logography**; **logosyllabic writing**; **pictography**; **syllabary**. *Cp.* **orthography**; **script**.

■ **reading-writing relationships** the connection, interplay, and mutual influence of reading and writing, including: *a.* common psychological processes. *b.* transactive or interactive influences on each other. *c.* in combination, positive learning and thinking effects. Also reading-writing connections. Note: Tierney and Shanahan (1991), in summarizing research on this topic, concluded that "reading and writing, to be understood and appreciated fully, should be viewed together, learned together, and used together." **See the essay titled "Whole Language" on pages 22 to 24 for further discussion of this term.**

Literacy

LITERACY IS A minimal ability to read and write in a designated language, as well as a mindset or way of thinking about the use of reading and writing in everyday life. It differs from simple reading and writing in its assumption of an understanding of the appropriate use of these abilities within a print-based society. Literacy, therefore, requires active, autonomous engagement with print and stresses the role of the individual in generating as well as receiving and assigning independent interpretations to messages. By extension of the basic competence implied by literacy, computer literacy, cultural literacy, economic literacy, and so forth have evolved as designations of minimal competence required in these areas.

Although conceptions of literacy have been based on reading and writing for hundreds of years, recent usage has extended the skill range to include mathematics, under the assumption that the understanding of everyday texts sometimes requires this knowledge. Further extension to include speaking and listening has also been suggested. When used as an adjective, *literacy* tends to have a looser definition, as in the phrase *literacy program*, which refers to a wide range of courses that include instruction in reading, writing, or other basic skills. These directions tend to inflate the significance of *literacy*, making it a cover term for all basic communication and calculation skills required for existing in a modern society.

Literacy derives from the Latin *litteratus*, which, in Cicero's time, meant "a learned person." In the early Middle Ages, the *litteratus* (as opposed to the *illitteratus*) was a person who could read Latin, but after 1300, due to the decline of learning in Europe, it came to signify a minimal ability with Latin. After the Reformation, *literacy* came to mean the ability to read and write in one's native language. According to the Oxford English Dictionary, the substantive *literacy* first appeared in English in the early 1880s, formed from the adjective *literate*, which occurred in English writing as early as the middle of the 15th century.

In current usage, the term implies an interaction between social demands and individual competence. Thus, the levels of literacy required for social functioning can and have varied across cultures and across time within the same culture. What was required for literacy in the time of Columbus is assumed to be different from what is required for literacy in industrialized nations today. Nevertheless, these differences may be more quantitative than qualitative. In the past century and well into this century, national emphasis on reduction of illiteracy led to a contrast between literacy and illiteracy, with the concomitant assumption of a sharp division between the two. Today literacy is understood as a continuum, anchored at the bottom by illiteracy. Of equal importance to illiteracy, however, is aliteracy—the unwillingness to use literacy even though the capability is present.

Attempts to define levels of literacy have led to such phrases as *functional literacy*, *marginal literacy*, *survival*

Literacy (continued)

literacy, and *semiliteracy*. Of these, *functional literacy*, which originated in the 1930s, has the widest currency. Since the UNESCO literacy studies of the 1950s, functional literacy has been defined in terms of skills or abilities required to use print to function in everyday life. This form of literacy has also been called *pragmatic* or *conventional literacy*. For marking the higher end of the literacy continuum, *cultured literacy*, *advanced literacy*, and *high literacy* are used.

Richard L. Venezky

Reader Response

READER RESPONSE THEORY maintains that reader and literary text must *transact*. This intermingling of reader and text is a creative act. In the words of Rosenblatt (1983), reading is thus a "performing art," the transaction unique and "never to be duplicated." The implication is to emphasize each reader's subjectivity, albeit with verification.

The reader response model suggests immediate application even though theorists may not agree on labels or perspective. First, the reader must be encouraged to surrender to the literary work, to "live through" the reading of it, to experience it fully without future purpose in mind. This is a stage of *evocation*, which avid readers will immediately recognize. Second, the reader broadens the transaction, examining *alternatives* based on other points of view suggested by the text, by other readers, and by comparison with other works. Third, the reader considers application of the experience to his or her own life: What is the ultimate effect of the transaction? This is a stage of *reflective thinking* and *evaluation*. The teacher's job, then, is to encourage and guide students through this model without imposing an interpretation or stock response on them.

A contrast exists between the transactional approach and common practice. In common practice, evocation often is supplanted by right-answer questions and text-based activity framed by someone other than the reader. Literary elements and comprehension factors take precedence over the search for alternative responses. "Let's find the author's theme" blocks reflective thinking to derive personal meaning from the transaction. To point out this contrast, Rosenblatt (1978) has described two stances of the reader, the aesthetic and the efferent, one denoting the "living through" evocation and reflective thinking of a reader unimpeded by other direction, the other denoting the "carrying away" of information to be used for some specified purpose. Both stances are desirable, depending on circumstances. They offer a continuum. For instance, a reader may "live through" reading about a dream house or dream boat that she hopes some day to own, at the same time efferently noting its details with an eye to building one or making a wise purchase. But Rosenblatt and others assert that the aesthetic stance is neglected in education. Efferent purpose setting, efferent instruction, and efferent assessment have overshadowed it. Only recently has there been a deliberate effort to balance the two stances.

Reader Response (continued)

With what results? Much of the theorizing is directed at secondary, young adult levels, yet ethnographies and other studies of reader response more often involve younger children. These reveal what some theorists seem disinclined to believe: Elementary-age children can, under suitable conditions, respond to their reading in ways that correspond to the entire transactional model. Suitable conditions include conscious effort to include aesthetic stance in teaching (Zarrillo, 1991), theme-based selection of text so that readers can more readily compare one transaction with another, and many ways of nurturing voluntary reading. Literature-strong reading programs with these attributes are better documented than in the past. Dare we hope that longitudinal study is finally possible, so that a tie between transactional theory and lifelong mature reading can be explored?

For now, reader response theory must deal with other questions and doubts. Probst (1991) notes that "response patterns mature within a cultural context that reinforces some patterns and discourages others," while Purves (1993) argues that "school literature" must take into account a broader range than response theory has afforded. How to encourage response to be individualistic but at the same time to illuminate cultural context, how to fit response theory into school settings without artificiality, how to generate self-realization in place of group-think as we implement the model or its successors—these are concerns unresolved.

Sam Leaton Sebesta

Phonemic Awareness

PHONEMIC AWARENESS IS the awareness of the sounds (phonemes) that make up spoken words. Such awareness does not appear when young children learn to talk; the ability is not necessary for speaking and understanding spoken language. However, phonemic awareness is important for learning to read. In alphabetic languages, letters (and letter clusters) represent phonemes, and in order to learn the correspondences between letters and sounds, one must have some understanding of the notion that words are made up of phonemes. This insight is not always easily achieved. Phonemes are abstract units, and when one pronounces a word one does not produce a series of discrete phonemes; rather, phonemes are folded into one another and are pronounced as a blend. Although most young children have no difficulty segmenting words into syllables, many find it very difficult to segment at the phoneme level. Indeed, both illiterate adults and adults who are literate in a language like Chinese, whose orthography does not represent phonemes with letters, also find segmenting words into phonemes difficult.

Work in the 1960s by Elkonin (1963) suggested that training in phonemic analysis would be a useful precursor to beginning reading instruction. Since that time, a substantial body of literature has provided evidence of the importance of phonemic awareness. First, correlational studies established that there was a strong relationship between phonemic awareness and reading performance in first and second

Phonemic Awareness (continued)

grades and that phonemic awareness tests in kindergarten predicted later reading skill in the first and second grades. In fact, the phonemic awareness of young prereaders was found to predict success in beginning reading better than did such measures as age, socioeconomic status, and IQ.

The results of these concurrent and predictive correlational studies encouraged the initiation of training studies. Early studies of this type revealed success when phonemic training was incorporated into comprehensive decoding programs. Later studies attempted to isolate the effects of phonemic awareness training per se. It appears that such training does facilitate reading achievement, and spelling, in the early school grades.

How is phonemic awareness measured? Studies have used a variety of tasks ranging from the very simple one of asking students whether two words rhyme, through sound-to-word matching and blending, to more challenging tasks such as isolating individual phonemes, segmenting a word into all its component phonemes, and deleting phonemes ("Say *bird* without the *b*"). One important challenge for the future is for researchers to agree on what measures might be most appropriate for defining the construct, for while it seems justifiable to consider phonemic awareness a cause of reading acquisition, it may also be a consequence of reading acquisition. Some of the more difficult abilities subsumed under the general label "phonemic awareness" seem to develop only after instruction in word recognition has taken place. A sorting out of these relationships would help the design of instructional programs.

In the classroom, teachers can help children acquire phonemic awareness by providing practice in segmenting spoken words via games based on some of the tasks used to assess phonemic awareness. This is not simply phonics instruction but rather training that enhances concurrent or subsequent phonics instruction or other reading instruction. As part of this concurrent or subsequent reading instruction, spelling activities, including the use of invented spellings, are also valuable. In addition, teachers can make sure that children are given literature that focuses on playing with sounds through rhyme, alliteration, and so on.

Joanna Williams

Whole Language

IN RECENT YEARS, no educational movement has produced as much interest, activity, and controversy as that of whole language. It has had a major impact on how the reading education community thinks and talks about instruction.

Whole language is both a professional movement and a theoretical perspective. It embodies a set of applied beliefs governing learning and teaching, language development, curriculum, and the social community. Historically, whole language may be viewed as part of a long tradition of progressivism in education that reflects concern and discontent with prevailing practice. Whole language teachers

have been influenced by theorists such as Lev Vygotsky, Louise Rosenblatt, Kenneth Goodman, and Frank Smith, among others. They make use of the implications drawn from language research, including studies of the writing process, sociolinguistics, psycholinguistics, and emergent literacy. Yet, while many disciplines and theories have influenced whole language, its proponents are quick to point out that it is not synonymous with any of them. Rather, it is a unique and evolving framework, rare among educational movements in that the great majority of its proponents are drawn from the ranks of classroom teachers.

Concerns and Controversies

Issues surrounding phonics and the teaching of discrete skills evoke the most heated discussions about whole language. Because whole language teachers believe that all language systems are interwoven, they avoid the segmentation of language into component parts for specific skill instruction. The use of strategies taught in meaningful contexts is emphasized. Phonics is taught through writing and by focusing on the patterns of language in reading—and students are taught only as much phonics as they need. Invented spelling is viewed as the best demonstration of the development of phonics relationships. Assessment focuses on authentic demonstrations of each student's ongoing work.

Critics of whole language would opt for a more systematic and hierarchical approach to phonics in the belief that instruction in sound-symbol relationships is foundational to learning to read. Some express concern that invented spelling encourages sloppy habits and reinforces incorrect behaviors. While there is a growing interest among all educators in more authentic approaches to assessment, standardized test scores remain the key indicator of success in literacy and the major determiner for decisions regarding promotion and placement. Thus, many teachers are reluctant to adopt whole language approaches. Instead they say, "We cannot teach one way and assess another."

The applicability of whole language to the upper grades is another concern. Although whole language advocates recommend it for all levels, its use is concentrated primarily in the lower grades. This comes as no surprise. Most early childhood and elementary teachers have some knowledge of child growth and development. Therefore, the principles and practices associated with whole language come more "naturally" to them. In the upper grades, where teachers are more likely to focus on curricular content, whole language theory with its blend of process and product may seem too indirect and inefficient. Even those who readily agree that learning the definition of adjective and acquiring the ability to locate one in a sentence has virtually nothing to do with writing a descriptive paragraph may opt to have students memorize definitions and identify parts of speech because they can be readily taught, learned, and tested.

Future of Whole Language

It has been said that whole language is for all children, but not for all teachers. There may be far more than a grain of truth in this. Because whole language theory is closely aligned to the way children learn their first language, it makes good sense to those who have taken the time to study it.

Whole Language (continued)

Unlike a parent, who usually deals with one child at a time, however, teachers find themselves in classrooms with as many as 30 or more students, all with varying needs and abilities. They ask how a single teacher can apply whole language principles with so many diverse individuals. In response, of course, one can point to the many teachers who are doing just that. Conversely, there are many others who will probably never be willing, because of philosophical differences, or capable of doing so. The question of capability probably has less to do with intelligence or motivation than it has to do with the tremendous staff development required to make the far-reaching changes asked of some teachers who wish to move toward whole language. Most school districts underestimate the time and effort required to effect meaningful change. In discussing plans for staff development, a very enthusiastic school principal once said to me, "Well, we did whole language last year. What do you suggest we do next?"

I believe that the positive effects of the whole language movement are both profound and enduring. At the same time, the controversy and confusion surrounding whole language will also have an exasperatingly long run. Ironically, evidence of the influence of whole language increasingly appears under the heading of various less controversial terms, such as *literature-based reading* or *integrated language arts*. Ultimately, the impact and future of whole language will rest in the educational community's commitment to look well beyond labels to examine thoughtfully the theory and practice whole language represents.

Dorothy S. Strickland

Readability

WRITING BECOMES READABLE, most agree, when variables in a text interact with those in a reader to make the writing easy to understand. Research shows that increased reader ability, motivation, and background knowledge of text content rather consistently produce significantly increased comprehension. Research fails, however, to show similar increases when changes are made in language or presentation variables of a text (such as organization, format, and typography). Early research in readability revealed that, in school reading materials, semantic difficulty and syntactic difficulty increased with grade level. These two style variables in text could be counted objectively in one form or another (such as word frequency and sentence length) and became the basis for most so-called readability formulas designed to predict reading difficulty. Other variables, though considered important, have still not been included in most formulas since they cannot be counted objectively.

More than 1,000 references to readability can be found in the literature, among them well over 100 different formulas for calculating readability of texts in English and in more than a dozen other languages. Formulas continue to be widely used in educational settings for their intended purpose: the prediction of which materials will be appropriate for particular readers. However, formulas have sometimes also been used in an attempt to make materials more readable—a use for which they were not intended. Making

Readability (continued)

changes to certain text variables, such as cutting sentence length or substituting more common words for less common, may yield better scores on a readability formula without corresponding increases in reader comprehension. Skilled writers, of course, can and do write readably, but improving comprehension through research-based alteration of language and presentation has proved elusive.

Critics, appropriately, label formulas unreliable (if not actually dangerous) when they are used for text-production purposes—and often also when they are used for prediction—because they are not perfectly accurate. The following suggestions can help users of formulas to make predictions of readability as accurately as possible.

- Consider your purpose in getting a readability score; cultivating readers calls for more challenging materials than does merely informing or entertaining them.
- Pick a good formula for your intended use, but consider all formulas screening devices and all scores probability statements.
- Choose a formula with two index variables, one semantic and one syntactic, as a desirable minimum.
- Increase the accuracy of your analysis by taking a large random (or numerically spread) sampling of text, both to increase the reliability of your average score and to get an indication of variability.
- Remember that different formulas may give somewhat different grade-level scores.
- Keep in mind that formula scores derive from counts of style variables; they become poorer predictors at higher grade levels where content weighs more heavily.
- Take into account your readers' ability, motivation, and background knowledge; otherwise scores may over- or underestimate difficulty.
- Do not rely on formulas alone in selecting materials; seek the opinion of experts or get reliable consensus opinions to examine characteristics that formulas cannot predict and to ensure that formulas have not been misused in producing materials.

George R. Klare

Dyslexia

DYSLEXIA MEANS GENERALLY an inability or partial inability to read. Originally it referred to the loss of ability to read following central nervous system damage or dysfunction, but it is now used to refer to a congenital or hereditary condition that interferes with the acquisition of reading skills and is often a part of a broader language problem. It is not due to sensory impairment, mental retardation, emo-

Dyslexia (continued)

tional disorders, lack of motivation, or faulty instruction; rather, the problem seems to be intrinsic.

Over the years, many theories regarding the fundamental nature of dyslexia have emerged. The earliest derived from studies of brain-behavior relationships and the symptoms associated with *acquired dyslexia*. Yet many physicians, diagnosticians, and educators recognized differences between acquired and congenital reading problems and distinguished the two by using the term *developmental dyslexia* for the latter. Others, however, objected to medically oriented labels and preferred *specific reading disability*. Currently *dyslexia* is used by some, but not all, reading professionals.

With the development of brain imaging techniques, more evidence for studying the biological bases for reading disabilities has become available. In addition, studies of familial dyslexia indicate possible hereditary factors, and several investigators have reported a high incidence of poor readers in families. Other researchers have focused on the behavioral, linguistic, and cognitive aspects of dyslexia to determine whether certain characteristics are more prominent or pervasive in dyslexics than in other groups of poor readers or normal achievers. For example, some theorists have suggested that dyslexics may suffer from visual perceptual deficits because of their tendency to reverse letters. Because reading involves both auditory and visual processes, other investigators have hypothesized and found some evidence for intersensory or crossmodal deficits. Others refuted these findings on methodological grounds. Several clinicians and researchers, often those working in the field of neuropsychology, have found evidence for possible subtypes of dyslexia, each perhaps rooted in a different deficit. Needless to say, the subtypes that emerge through research vary with the test instruments used, as well as with the age of the subjects.

Many professionals have studied dyslexia from a psycholinguistic perspective. These researchers explore the acquisition of multiple-rules systems and the integration of spoken and written language. In recent years, numerous studies have indicated that the core problem in dyslexia is related to phonological coding and a lack of linguistic awareness, particularly phonemic awareness. Some theorists have identified deficits in higher order verbal skills including morphology, syntax, and comprehension. In forming their conclusions, however, a great deal depends on the researchers' definitions of reading and the measures of reading used in their studies. Other researchers use paradigms from cognitive psychology, concentrating on information processing, lexical decision making, working memory, and other factors that contribute to reading disabilities. Still others use developmental perspectives and ask whether dyslexics simply acquire skills at a slower rate or in a different way from normally achieving readers. In recent years, the emphasis has been on verbal coding, particularly phonological coding, and numerous studies support the hypothesis that dyslexia may stem from deficits in this area.

Clearly, many causes of dyslexia have been posited over the years, and we have yet to arrive at a conclusive explanation for the problem. It seems that we must continue to investigate broader language and conceptual problems, possibly through more large collaborative studies aimed at determining whether there are distinct patterns of problems among dyslexics. However, it is probably true that no single

problem can account for all disabilities. Even in families with histories of dyslexia, the symptoms are not always the same.

Dyslexics are similar because they all have reading problems and verbal deficits of some type. The core problem for those with word-recognition difficulty appears to involve phonological coding and phonemic awareness, but others have higher order problems. We cannot ignore the fact that visual processing is required for reading and that students must integrate spoken language with print. However, we also need to acknowledge the complexity of the reading process and the many different ways that individuals respond to instruction.

In diagnosing any reading disability, the assessment should be comprehensive so that appropriate intervention can be provided. Certain students can compensate for minor weaknesses because of strengths in other areas. For many years, educators in both regular and special education have argued for the teaching of multiple reading strategies and for ensuring balance in programs. In order to be competent readers, students need to use many strategies, including sight-word recognition, morphological analysis, phonetic analysis, and contextual cues; they also need a good background of knowledge and oral language skills. Therefore, when working with dyslexics, we need to evaluate their use of many types of strategies across various reading tasks to determine which skills are intact or deficient, and then conduct more research to determine the most successful intervention procedures.

As we conduct research in the future, we must remember that not every poor reader is deficient in phonological awareness: we cannot ignore the many students who can "recode" without comprehension. In recent years, considerable emphasis has been given to problems of adult literacy and dyslexia. Adults with persistent, severe reading disabilities frequently have global language disorders that involve far more than decoding. Detailed studies of their disabilities may provide data that can be used for prevention of reading problems in early childhood. When we set up our studies, we must also be aware that long-term, follow-up research indicates that even with excellent help, many problems persist among dyslexics. Even though students make progress, they often have residual problems in decoding, reading speed, spelling, and written language. (The latter might be expected since writing is the highest form of language and typically requires more skills than reading.)

One final suggestion for future research: In any new study, whatever terminology is used, researchers should specify the characteristics of the population. It is not enough to know whether subjects are good or poor readers. When examining a complex problem such as dyslexia, we must also know about subjects' intellectual levels, cognitive processes, language use, and other symbolic behavior.

Doris Johnson

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